



Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU

DENR Compound, Visayas Avenue, Diliman, Quezon City 1116

Telephone Nos.: 927-15-17, 928-20-96

Email : emb@emb.gov.ph

Visit us at <http://www.emb.gov.ph>

MAR 31 2014

Memorandum Circular No. 003
Series of 2014

SUBJECT: SUPPLEMENTAL GUIDELINES FOR THE DENR AO 2007-23 (PRESCRIBING ADDITIONAL REQUIREMENTS FOR THE ISSUANCE OF THE PRIORITY CHEMICAL LIST (PCL) COMPLIANCE CERTIFICATE

I. INTRODUCTION

The Revised Priority Chemical List (PCL) per DENR Administrative Order (DAO) No. 2005-27 added Twenty (20) new chemicals to the twenty-eight (28) PCL chemicals (initially selected under DAO No. 98-58) based on primary criteria (high toxicity rating) and secondary criteria (quantity of importation and use of industry). With very limited information and tracking of the chemicals listed in the Revised PCL, DAO No. 2007-23 (Prescribing Additional Requirements for the Issuance of the PCL Compliance Certificate) was issued for more effective management of these chemicals.

II. OBJECTIVES

This Memorandum Circular aims to:

- 2.1 Provide the necessary supplemental guidelines for the proper implementation of DAO No. 2007-23, particularly on the processing and issuance of PCL Compliance Certificate as required in Sections III, IV and V thereof.
- 2.2 Guide the industry and other related sectors to comply with the additional requirements under DAO 2007-23 and to provide information relevant to the assessment of risks posed by chemicals to public health, safety and environment.
- 2.3 Provide the EMB Central and Regional Offices with the needed mechanism for strengthening the monitoring and compliance validation program for these PCL chemicals and limit their release to the environment.

III. DEFINITION

- 3.1 Importer-distributor means a single proprietorship, partnership or corporation that engages in importation and distribution of PCL chemicals.
- 3.2 Importer-User-Manufacturer means a single proprietorship, partnership or corporation that engages in the importation and production using PCL chemicals as raw materials for transformation into new products and other usages.

- 3.3 User-Manufacturer means a single proprietorship, partnership or corporation that engages in production using PCL chemicals as raw materials for transformation into new products and other usages.

IV. SCOPE AND COVERAGE

The following persons or entities who shall engage in activities or operations involving the importation, handling, transport, distribution, storage, use, and manufacture of the regulated PCL chemicals are required to secure the PCL Compliance Certificate:

- 4.1. Importer-Distributor
- 4.2 Importer-User-Manufacturer
- 4.3 User-Manufacturer

V. GENERAL RULES, REQUIREMENTS AND PROCEDURES

- 5.1 The PCL additional requirements (Annex A) together with the application form for PCL Compliance Certificate (Annex B) shall be filed at the DENR EMB-Central Office.
- 5.2 Application for renewal of PCL Compliance Certificate shall be filed at least 20 working days prior to the expiry date of the Certificate or 20 working days prior to the expected time of arrival of the imported chemical (for importer's new application). Only the submission of the following updated documentary requirements is needed:
- 1) Notarized Annual Report (Annex C);
 - 2) Summary of Importation Data (Annex D);
 - 3) List of Customers/Users (Annex E), and
 - 4) Self Monitoring Report (if applicable).
- 5.3 Payment of PhP 500.00 processing fee per chemical.
- 5.4 In case of additional requirements (Annex A), the applicant shall be given 45 working days to complete the requirements. Failure to complete the requested additional requirements within 45 working days shall cause the cancellation of the application. The client shall re-apply for the PCL Compliance Certificate.
- 5.5 The processing time for the application, including the review and evaluation of its supporting documents and the conduct of ocular inspection for validation purposes shall be twenty (20) working days from receipt of the application.
- 5.6 The PCL Compliance Certificate shall be valid for one (1) year.
- 5.7 In case of request for change of quantity granted in the previously issued PCL Compliance Certificate, the company shall re-apply for registration.

VI. SPECIFIC RULES, PROCEDURES AND REQUIREMENTS

This Section provides the specific rules, requirements and procedures in the preparation of three (3) basic requirements of DAO No. 2007-23: a) Chemical Management Plan; b) Contingency Plan, and c) Monitoring.



6.1 CHEMICAL MANAGEMENT PLAN (CMP)

The Chemical Management Plan (CMP) shall adequately describe the regulated PCL chemical(s) in the operational process and their uses. The importers-distributors, importers-users-manufacturers and users-manufacturers shall consider in the CMP the adoption and observance of precautionary health, safety and environmental mitigation measures in accordance with the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS), the local safety, health and environmental standards/regulations, and the generally accepted practices for the same in both local and international scenes. The importers-distributors, importers-users-manufacturers and users-manufacturers shall ensure that adequate resources (financial and technical) are allocated and provided for the CMP implementation but not limited to the following:

6.1.1 Brief Description of the Chemical

- 6.1.1.1 As referred to in MSDS/SDS, provide brief description of the physical and chemical properties of the substance;
- 6.1.1.2 Purpose and use of the chemicals (i.e., as raw material, process and quality enhancer, etc.) and estimated quantity of the regulated PCL chemicals to be imported/used/distributed, and
- 6.1.1.3 Flow Diagram/Chart of Operational Processes involving the PCL Chemicals

6.1.2 Storage

- 6.1.2.1 Provisions for adequate, suitable and proper storage of regulated PCL chemicals in accordance with the MSDS/SDS, safety, health and environmental rules and regulations and generally acceptable practices;
- 6.1.2.2 Adoption of segregation or stocks grouping for the regulated PCL chemicals based on hazards category and compatibility of their physical and chemical characteristics. Such may correspond to the usages and types of packaging of regulated PCL chemicals, (i.e., flammable substances to be isolated from sources of ignition, reactive oxidizing/reducing agents; exposure of chemical to sunlight or source of heat or any form of radiation or vibration, among others.) Photographs/pictures of the storage area should be provided;
- 6.1.2.3 Availability of warehouse information on the importation/details (inventory of items with quantities), proper records keeping and housekeeping program in accordance with the storage and handling procedures being practiced;
- 6.1.2.4 Adoption and maintenance of proper design and engineering control for the warehouse/storage facility, including adequate cover, enclosure equipped with necessary ventilation or air conditioning systems whichever is applicable, to ensure the desired humidity, pressure and temperature conditions;



- 6.1.2.5 Provision and use of adequate lighting/illumination and safety equipment system, including alarms, emergency response paraphernalia, materials, devices and personnel protective equipment (PPE's) as needed;
- 6.1.2.6 Delineation of the area to be used or being utilized as chemicals storage with strict security, limited accessibility and standard/appropriate labeling procedures (i.e., conspicuous markings or posting of proper labels and signages for safety), and
- 6.1.2.7 Regular inspection and monitoring schedules to check conformance to the established operation and maintenance (O&M) plan, program and procedures at the storage facility/warehouse.

6.1.3 Handling and Transport

- 6.1.3.1 Appropriateness of the packaging materials for regulated PCL chemicals to avoid potential contaminations, leaks and spillages;
- 6.1.3.2 Provision and use of appropriate transport vehicle equipped with necessary loading and unloading equipment, observance of load limits/restrictions, including safety and emergency response paraphernalia, materials, devices and/or equipment as needed, and
- 6.1.3.3 Provision and use of containers that will maintain the original quality and integrity of the regulated PCL chemicals and packing materials, including the appropriate cap/cover, binding/holding straps and pallets for total containment and stability during transport to avoid or minimize chemical releases to the environment.

6.1.4 Use and Disposal

- 6.1.4.1 Description of the processes and volumes of the product(s) being manufactured or to be produced using the regulated PCL chemicals and showing the entry of such chemical(s) and the potential or possible discharge and emission of generated toxic and hazardous wastes, if any;
- 6.1.4.2 List of all processes and support equipment which involve the use/handling of the regulated PCL chemicals in the operation, including packing or repacking of chemicals and the provisions for the prevention and control of wastage/spillage or discharge/emission of such chemical;
- 6.1.4.3 Identification and description of waste residues and expired chemicals, their concentrations/quantities being generated and handling, treatment and disposal method(s) to be applied or being utilized, including any of their contaminated packaging. If disposed and treated off-site, hazardous waste transporters and treaters including manifest forms shall be indicated, and



6.1.4.4 Undertake proper containment of generated wastes (expired/obsolete chemicals and damaged packaging) and stocking or holding of the same in a delineated/isolated area prior to eventual treatment and disposal through authorized/registered recyclers and/or TSD facilities under DAO 36, Series of 2004.

6.1.5 Chemical Substitution Plan

6.1.5.1 Description of the activities and chemical to substitute the used PCL chemicals, and

6.1.5.2 Target timelines.

6.1.6 Safety and Health Requirements

6.1.6.1 Provision and use of appropriate personnel protective equipment (PPE's) such as gloves, corrosion or chemical resistant apron or clothing (cover-alls), respirator for potential vapor and dust emission, safety eye goggles, face shield, safety shoes and others as may be necessary.

6.1.7 Training Program

6.1.7.1 Scope and coverage of training program being implemented or to be implemented, about the chemicals being handled or a copy of the Training Manual.

6.1.7.2 Frequency of training of concerned personnel.


6.1.7.3 List of personnel involved in handling regulated PCL chemicals who have undergone training or copies of their training certificates.

6.1.7.4 In-house training or awareness raising on the risks and hazard potentials involved in the storage, handling, transport, use, manufacture and/or disposal of generated wastes of the regulated PCL chemicals shall be shared with workers and the community adjacent to or surrounding the plant vicinity (if applicable).

6.2 **CONTINGENCY PLAN AND EMERGENCY PLAN**

Any accidental or intentional incidence, occurrence of spillage, leakage, release and other chemical emergencies of the regulated PCL chemicals or their generated wastes shall require immediate response which includes trouble shooting and implementation of immediate corrective action(s) to stop and contain the emergency (Annex F). Listed below are some assessment and response actions reflected through Emergency Preparedness and Mitigation Strategies. This response plan may be undertaken where the emergency situation exists to avoid/minimize said emergencies:

6.2.1 Identification of the regulated PCL chemicals and substances involved and relevant technical information, including volume, flammable or explosive components and the possible leakage, discharge or emission to determine the type of response actions;



- 6.2.2 Knowledge of the possible risks or potential impacts of the regulated PCL chemicals to safety, health and the environment, most importantly, the exposure routes and the results either immediate (acute) and long term (chronic) as contained in the ISO 16-sections format MSDS/SDS;
- 6.2.3 Inventory of the existing facilities and process equipment, including provisions and measures for preventing or controlling possible leakage, discharge or emission of the regulated PCL chemicals;
- 6.2.4 Organization of Emergency Response Team(s) comprising of personnel with adequate training in coordinating and addressing emergency situations;
- 6.2.5 Preparation of Standard Operating Procedures (SOP)/ Instructional Manual for emergency situations, (i.e., organization, documentation, among others);
- 6.2.6 List of first aid materials, paraphernalia and equipment to be used during accidents or incidents involving injuries to personnel and/or affected public, and first aid procedures to be undertaken according to different routes of exposure (i.e., inhalation, ingestion, and skin and eye contacts);
- 6.2.7 Assessment and evaluation of the degree or level of potential risks or injury of the regulated PCL chemicals involved in the operation with corresponding actions to be taken as indicated below:
 - 6.2.7.1 Low risk - Prevention and Control Measures are not necessary when there is relatively small likelihood that a substance will cause harm in the event of manufacture, usage and handling;
 - 6.2.7.2 Medium risk - Prevention and Control Measure(s) and associated efforts are required to mitigate the risk with partial or no stoppage of operations, and
 - 6.2.7.3 High risk - Immediate stoppage of operations is required accompanied by immediate implementation of Prevention and Control Measure(s) and associated efforts. This occurs during extreme cases when accidents will cause danger or harm to workers and the immediate environment.
- 6.2.8 Implementation of relevant prevention and control measures to address the level of risks involved in the regulated PCL chemicals are as follows:
 - 6.2.8.1 Inspection schedule and checklist;
 - 6.2.8.2 Availability of precautionary warnings such as signs and labels;
 - 6.2.8.3 Wearing of appropriate Personal Protective Equipment as prescribed in the MSDS/SDS and technical information sheet or literature about the chemical;



- 6.2.8.4 Application of high level of prevention and control provisions/measures in cases involving unknown chemicals and/or uncertain conditions and circumstances (spillage, leaks, etc. on the assumption of the worst emergency situation), and
- 6.2.8.5 Notification of the concerned authorities and preparation of documents (i.e., reports required by the Local Government Units (LGUs) and Philippine National Police of the Department of Interior and Local Government) on the accidents causing the emergency situation.

6.3 MONITORING

The EMB Air Quality Monitoring Manual (2004) and Water Quality Monitoring Manual (2008) shall be used for reference wherever applicable by the concerned importer-user-manufacturer and user-manufacturer only to facilitate compliance with the monitoring requirements prescribed under this Circular. In addition, the rules and guidelines of the Department of Labor and Employment (DOLE)- Occupational Safety and Health Center (OSHC) and Bureau of Working Conditions (BWC) shall also be referred to. The following rules shall be strictly observed:

6.3.1 Water Monitoring and Sampling Requirements

- 6.3.1.1 The concerned importer-user-manufacturer and user-manufacturer of chemical substances shall be responsible for annual monitoring and reporting activities of groundwater and surface water. The monitoring results shall be submitted annually and reported in the 4th Quarter Self-Monitoring Report including, the Certificate of Water Analysis;
- 6.3.1.2 In case the water quality results are not covered by existing national standards, compliance shall be assessed and evaluated against the internationally-accepted standards and guidelines values. For water bodies used for drinking purposes, the World Health Organization (WHO) criteria/guidelines shall apply until such time that the appropriate PCL standards has been developed for Philippine conditions as per DAO 2007-23 dated 31 July 2007;
- 6.3.1.3 Water sampling stations in surface-water bodies shall be located at an appropriate distance upstream and downstream of any point or area source discharge that is likely or suspected to be contaminated with the regulated PCL chemicals;
- 6.3.1.4 Sufficient number of groundwater monitoring wells (at least two per discharge point or area source effluent) shall be suitably located in coordination with National Water Resources Board (NWRB) and Mines and Geosciences Bureau (MGB), and



- 6.3.1.5 Adequacy of the selected site of groundwater monitoring wells whether upstream or downstream with respect to the location of the discharge point or area source effluent and direction, depth and flow of groundwater in coordination with NWRB or MGB shall be ensured.

6.3.2 Air Monitoring and Sampling Requirements

- 6.3.2.1 The highly-volatile substances (PCL chemicals) shall be subject to vapor emission monitoring or as indicated in the Safety Data Sheet (SDS);
- 6.3.2.2 Ensure safety and protection of workers from the use of regulated substances through close monitoring of the work environment, and
- 6.3.2.3 Identification of air quality sampling stations (point source or ambient) at area likely or suspected to be contaminated with the emissions of highly volatile regulated PCL chemicals.

6.3.3 Laboratory Analysis and Testing

The applicant shall closely coordinate with EMB for the list of recognized laboratories following internationally accepted methods and standards and approved analytical methods to analyze potential discharges and emission of regulated PCL chemicals/substances.

6.3.4 Report Preparation

- 6.3.4.1 The Self Monitoring Report (SMR) of the 4th Quarter of each year shall be attached to the application for PCL renewal, and
- 6.3.4.1 Results of sampling and laboratory analysis shall be submitted at the end of the year by users-manufacturers and importer-users-manufacturers and be made available at all times for EMB validation.

VII. EXEMPTION

Exemption from securing a PCL Compliance Certificate or complying with DAO 2007-23 shall be granted to:

- 7.1 The importer-distributor, importer-user-manufacturer and user - manufacturer of PCL chemicals covered under the Chemical Control Orders (CCOs), and
- 7.2 PCL chemicals that are simply component ingredient(s) of other substances/products with threshold limit cut off of less than or equal to 1% concentration (in mixtures). The industry shall apply for such exemption in compliance with this Memorandum Circular for PCL chemicals subject to evaluation and approval of EMB (Annex G).

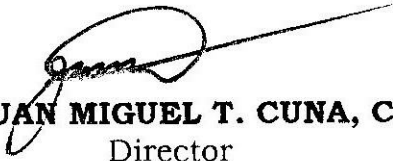


VIII. PENALTY PROVISIONS

Existing and operating industries and related sectors who are found violating this Memorandum Circular (MC) shall be imposed sanctions and fines in accordance with the Graduated Administrative Fines under DENR Memorandum Circular No. 2005-003 of DAO 92-29, RA 6969 of Toxic Substances under Title II of RA 6969 and its Implementing Rules and Regulations (DAO 92-29).

IX. EFFECTIVITY

This Circular shall take effect fifteen (15) days after its complete publication in a newspaper of general circulation.


ATTY. JUAN MIGUEL T. CUNA, CESO IV
Director